

-- MVP 5180 (SEQ ID NO: 21)

Arg Leu Gln Ala Leu Glu Thr Leu Ile Gln Asn Gln Gln Arg Leu Asn Leu Trp Gly Cys

1 5 10 15 20

Lys Gly Lys Leu Ile Cys Tyr Thr Ser Val Lys Trp Asn Thr Ser

25 30 35

REMARKS

The specification is amended, hereby, to contain the sequence identifiers SEQ ID NO: 1 - SEQ ID NO: 22. The requisite marked-up version of the amendment is attached, hereto.

According to the Office Action, full compliance with PTO Rules governing biological sequences was not met because the specification allegedly did not contain sequences 17-20, pages 1, 9-12, and 20 were not amended to incorporate appropriate sequence identifiers, and 23 sequence identifiers were listed as opposed to 22 sequence identifiers in the Sequence Listing.

By the instant amendment, the number of sequence identifiers in the specification corresponds to the number contained in the Sequence Listing, i.e., each of the specification and Sequence Listing contains SEQ ID NO: 1 - SEQ ID NO: 22. In particularly by the instant Amendment, SEQ ID NO: 17 and SEQ ID NO: 18 are identified at page 5, and SEQ ID NO: 19 and SEQ ID NO: 20 are identified at page 28, and pages 1, 9-12, and 20 incorporate appropriate sequence identifiers.

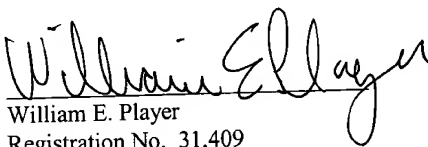
Serial No.: 09/147,362
Atty. Docket No. P63163US0

Accordingly, compliance rules are fully met and the response is in full compliance with the Notice to Comply. No amendments to the Sequence Listing are necessary.

Favorable action is requested..

Respectfully submitted,

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Atty. Dkt. No.: P63163US0
Date: May 7, 2002
WEP/rdt
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Application EP 0,673,948 describes synthetic or recombinant peptides consisting of 15 to 50 amino acids (AA) and comprising the sequence

-VWGIRQLRARLQALETLIQNQQRLNLWGXXGKLIXYTSVKWNTSWSGR- (SEQ ID NO: 22)

wherein X represents either a cysteine residue, or a serine residue. These peptides are useful in the diagnostic field for the detection of infections due to certain group O HIV-1 retrovirus isolates.

•(AA₅) represents either an isoleucine residue, or a valine residue, or a leucine residue, or a threonine residue, or a norleucine residue, or a norvaline residue, provided, however, that (AA₁), (AA₂), (AA₃), (AA₄) and (AA₅) never form together the peptide sequences -Lys Gly Lys Leu Ile- (SEQ ID NO: 17) and -Lys Gly Lys Leu Val- (SEQ ID NO: 18).

Sequence No. 1 (SEQ ID NO: 1)

-LLSLWGCRGKAVCYTSVQWNET-

or

-Leu Leu Ser Leu Trp Gly Cys Arg Gly Lys Ala Val Cys Tyr Thr Ser Val Gln Trp Asn

1

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Glu Thr-

22

Sequence No. 2 (SEQ ID NO: 2)

-LLSLWGCRGRLVCYTSVQWNET-

or

-Leu Leu Ser Leu Trp Gly Cys Arg Gly Arg Leu Val Cys Tyr Thr Ser Val Gln Trp Asn

Marked Up Pages Of Amendment

Ser. No. 09/147,362

Page 2

1	5	10	15	20
Glu Thr-				
22				

Sequence No. 3 (SEQ ID NO: 3)

-LLSSWGCKGRLVCYTSVQWNET-

or

-Leu Leu Ser Ser Trp Gly Cys Lys Gly Arg Leu Val Cys Tyr Thr Ser Val Gln Trp Asn

1	5	10	15	20
Glu Thr-				
22				

Sequence No. 4 (SEQ ID NO: 4)

-LLSSWGCKGRLVCYTSVQWNST-

or

-Leu Leu Ser Ser Trp Gly Cys Lys Gly Arg Leu Val Cys Tyr Thr Ser Val Gln Trp Asn

1	5	10	15	20
Ser Thr-				
22				

Sequence No. 5 (SEQ ID NO: 5)

-LLQSWGCKGRLVCYTSVQWNST-

or

-Leu Leu Gln Ser Trp Gly Cys Lys Gly Arg Leu Val Cys Tyr Thr Ser Val Gln Trp Asn

1	5	10	15	20
Ser Thr-				
22				

Sequence No. 6 (SEQ ID NO: 6)

-LLNSWGCRGKAVCYTSVQWNET-

or

-Leu Leu Asn Ser Trp Gly Cys Arg Gly Lys Ala Val Cys Tyr Thr Ser Val Gln Trp Asn
1 5 10 15 20

Glu Thr-

22

Sequence No. 7 (SEQ ID NO: 7)

-LLSLWGCRGRAVCYTSVQWNET-

or

-Leu Leu Ser Leu Trp Gly Cys Arg Gly Arg Ala Val Cys Tyr Thr Ser Val Gln Trp Asn
1 5 10 15 20

Glu Thr-

22

Sequence No. 8 (SEQ ID NO: 8)

-LLSSWGCRGRLVCYTSVQWNET-

or

-Leu Leu Ser Ser Trp Gly Cys Arg Gly Arg Leu Val Cys Tyr Thr Ser Val Gln Trp Asn
1 5 10 15 20

Glu Thr-

22

Sequence No. 9 (SEQ ID NO: 9)

-LLSSWGCKGRLVCYTS-

or

-Leu Leu Ser Ser Trp Gly Cys Lys Gly Arg Leu Val Cys Tyr Thr Ser-
1 5 10 15

Sequence No. 10 (SEQ ID NO: 10)

-LLNSWGCKGRLVCYTS-

or

-Leu Leu Asn Ser Trp Gly Cys Lys Gly Arg Leu Val Cys Tyr Thr Ser-
1 5 10 15

Sequence No. 11: (SEQ ID NO: 11)

-ALETLLQNQQLLNSWGCRGRLVCYTSSVRWNET-

or

-Ala Leu Glu Thr Leu Leu Gln Asn Gln Gln Leu Leu Asn Ser Trp Gly Cys Arg Gly
1 5 10 15
Arg Leu Val Cys Tyr Thr Ser Val Arg Trp Asn Glu Thr-
20 25 30

Sequence No. 12: (SEQ ID NO: 12)

-ALETLLQNQQLLNIWGCRGRLVCYTSSVRWNET-

or

-Ala Leu Glu Thr Leu Leu Gln Asn Gln Gln Leu Leu Asn Ile Trp Gly Cys Arg Gly
1 5 10 15
Arg Leu Val Cys Tyr Thr Ser Val Arg Trp Asn Glu Thr-
20 25 30

Sequence No. 13: (SEQ ID NO: 13)

-ALETLLQNQQLLDLWGCRGRLVCYTSSVRWNET-

or

-Ala Leu Glu Thr Leu Leu Gln Asn Gln Gln Leu Leu Asp Leu Trp Gly Cys Arg Gly
1 5 10 15
Arg Leu Val Cys Tyr Thr Ser Val Arg Trp Asn Glu Thr-
20 25 30

Sequence No. 14: (SEQ ID NO: 14)

-LNQQRLLNSWGCKGRLVCYTSV-

or

-Leu Asn Gln Gln Arg Leu Leu Asn Ser Trp Gly Cys Lys Gly Arg Leu Val Cys Tyr
1 5 10 15

Thr Ser Val-

20

Sequence No. 15: (SEQ ID NO: 15)

-RALETLLNQQRLLNSWGCKGRLVCYTSV-

or

- Arg Ala Leu Glu Thr Leu Leu Asn Gln Gln Arg Leu Leu Asn Ser Trp Gly Cys Lys
1 5 10 15

Gly Arg Leu Val Cys Tyr Thr Ser Val-

20

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Sequence No. 16: (SEQ ID NO: 16)

-RLNSWGCKGRLVCYTSV-

or

- Arg Leu Asn Ser Trp Gly Cys Lys Gly Arg Leu Val Cys Tyr Thr Ser Val-
1 5 10 15

The synthetic peptides below are particularly preferred peptides:

PEPTIDE No. 1 (2B): SEQ ID No. NO: 1

LLSLWGCRGKAVCYTSVQWNET

or

Leu Leu Ser Leu Trp Gly Cys Arg Gly Lys Ala Val Cys Tyr Thr Ser Val Gln Trp Asn
1 5 10 15 20

Glu Thr

22

PEPTIDE No. 2 (3B) : SEQ ID No. NO: 2

LLSLWGCRGRLVCYTSVQWNET

or

Leu Leu Ser Leu Trp Gly Cys Arg Gly Arg Leu Val Cys Tyr Thr Ser Val Gln Trp Asn
1 5 10 15 20

Glu Thr

22

PEPTIDE No. 3 (4B) : SEQ ID No. NO: 3

LLSSWGCKGRLVCYTSVQWNET

or

Leu Leu Ser Ser Trp Gly Cys Lys Gly Arg Leu Val Cys Tyr Thr Ser Val Gln Trp Asn
1 5 10 15 20

Glu Thr

22

PEPTIDE No. 4 (5B) : SEQ ID No. NO: 4

LLSSWGCKGRLVCYTSVQWNST

or

Leu Leu Ser Ser Trp Gly Cys Lys Gly Arg Leu Val Cys Tyr Thr Ser Val Gln Trp Asn
1 5 10 15 20

Ser Thr

22

PEPTIDE No. 5 (6B) : SEQ ID No. NO: 5

LLQSWGCKGRLVCYTSVQWNST

or

Leu Leu Gln Ser Trp Gly Cys Lys Gly Arg Leu Val Cys Tyr Thr Ser Val Gln Trp Asn
1 5 10 15 20

Ser Thr

22

PEPTIDE No. 6 : SEQ ID No. NO: 6

LLNSWGCRGKAVCYTSVQWNET

or

Leu Leu Asn Ser Trp Gly Cys Arg Gly Lys Ala Val Cys Tyr Thr Ser Val Gln Trp Asn
1 5 10 15 20

Glu Thr

22

PEPTIDE No. 7 : SEQ ID No. NO: 7

LLSLWGCRGRAVCYTSVQWNET

or

Leu Leu Ser Leu Trp Gly Cys Arg Gly Arg Ala Val Cys Tyr Thr Ser Val Gln Trp Asn
1 5 10 15 20

Glu Thr

22

PEPTIDE No. 8 (7B) : SEQ ID No. NO: 8

LLSSWGCRGRLVCYTSVQWNET

or

Leu Leu Ser Ser Trp Gly Cys Arg Gly Arg Leu Val Cys Tyr Thr Ser Val Gln Trp Asn
1 5 10 15 20

Glu Thr

22

PEPTIDE No. 9 (12B) : SEQ ID No. NO: 9

LLSSWGCKGRLVCYTS

or

Leu Leu Ser Ser Trp Gly Cys Lys Gly Arg Leu Val Cys Tyr Thr Ser
1 5 10 15

PEPTIDE No. 10 (14B) : SEQ ID No. NO: 10

LLNSWGCKGRLVCYTS

or

Leu Leu Asn Ser Trp Gly Cys Lys Gly Arg Leu Val Cys Tyr Thr Ser
1 5 10 15

PEPTIDE No. 11 (18B) : SEQ ID No. NO: 11

ALETLLQNQQLLNSWGCRGRLVCYTSVRWNET

or

Ala Leu Glu Thr Leu Leu Gln Asn Gln Gln Leu Leu Asn Ser Trp Gly Cys Arg Gly
1 5 10 15
Arg Leu Val Cys Tyr Thr Ser Val Arg Trp Asn Glu Thr
20 25 30

PEPTIDE No. 12 (19B) : SEQ ID No. NO: 12

ALETLLQNQQLLNIWGCRGRLVCYTSVRWNET

or

Ala Leu Glu Thr Leu Leu Gln Asn Gln Gln Leu Leu Asn Ile Trp Gly Cys Arg Gly
1 5 10 15
Arg Leu Val Cys Tyr Thr Ser Val Arg Trp Asn Glu Thr
20 25 30

PEPTIDE No. 13 (20B) : SEQ ID No. NO: 13

ALETLLQNQQLLDLWGCRGRLVCYTSVRWNET

or

-Ala Leu Glu Thr Leu Leu Gln Asn Gln Gln Leu Leu Asp Leu Trp Gly Cys Arg Gly

1

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15

Arg Leu Val Cys Tyr Thr Ser Val Arg Trp Asn Glu Thr

20

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PEPTIDE No. 14 (21B) : SEQ ID No. NO: 14

LNQQRLLNSWGCKGRLVCYTSV

or

Leu Asn Gln Gln Arg Leu Leu Asn Ser Trp Gly Cys Lys Gly Arg Leu Val Cys Tyr

1

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10

15

Thr Ser Val

20

PEPTIDE No. 15 (22B) : SEQ ID No. NO: 15

RALETLLNQQRLLNSWGCKGRLVCYTSV

or

Arg Ala Leu Glu Thr Leu Leu Asn Gln Gln Arg Leu Leu Asn Ser Trp Gly Cys Lys

1

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15

Gly Arg Leu Val Cys Tyr Thr Ser Val

20

25

PEPTIDE No. 16 (23B) : SEQ ID No. NO: 16

RLNSWGCKGRLVCYTSV

or

Arg Leu Asn Ser Trp Gly Cys Lys Gly Arg Leu Val Cys Tyr Thr Ser Val

1

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15

Preparation of a compound according to the invention; PEPTIDE No. 2 (3B)

(SEQ ID NO: 2)

LLSLWGCRGRLVCYTSVQWNET

or

Leu Leu Ser Leu Trp Gly Cys Arg Gly Arg Leu Val Cys Tyr Thr Ser Val Gln Trp Asn
1 5 10 15 20

Glu Thr

22

These two peptides have the following sequence:

VAU 22 AA (SEQ ID NO: 19)

Leu Leu Asn Leu Trp Gly Cys Lys Asn Arg Ala Ile Cys Tyr Thr Ser Val Lys Trp Asn
1 5 10 15 20

Lys Thr

22

VAU 35 AA (SEQ ID NO: 20)

Arg Leu Leu Ala Leu Glu Thr Phe Ile Glu Glu Asn Glu Leu Leu Asn Leu Trp Gly Cys
1 5 10 15 20

Lys Asn Arg Ala Ile Cys Tyr Thr Ser Val Lys Trp Asn Lys Thr

25

30

35

MVP'5180 (SEQ ID NO: 21)

Arg Leu Gln Ala Leu Glu Thr Leu Ile Gln Asn Gln Gln Arg Leu Asn Leu Trp Gly Cys

1

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20

Lys Gly Lys Leu Ile Cys Tyr Thr Ser Val Lys Trp Asn Thr Ser

25

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